

Publication Committee E. T. Cresson,
 J. L. LeConte, M.D.,
 Chas. Wilt,
 George H. Horn, M.D.,
 C. A. Blake.

All of which is respectfully submitted.

J. H. RIDINGS, *Recorder*.

REPORT OF THE BOTANICAL SECTION.

Since the last—our first annual report—our meetings have been held regularly. Seven members of the Academy have been received into the Section during the year, making the total number of members of the Section twenty-nine.

The only paper of general interest submitted to the Section was the List of Ballast Plants made by Mr. Isaac Burk, and which has been published in the Proceedings of the Academy. At every meeting verbal communications of much interest to specialists in various branches of botany have been made by Messrs. W. M. Canby, J. H. Redfield, J. A. Ryder, Thomas Meehan, Isaac Burk, J. C. Martindale, and Prof. Rothrock.

Numerous additions to the herbarium have been made through the Section as per report annexed.

The Conservator's report to the Section is of such general interest that it is submitted herewith entire.

The Treasurer's report shows that all the expenses of the Section have been kept within its income.

The officers elected to serve for the ensuing year are as follows:—

<i>Director</i>	Dr. W. S. W. Ruschenberger.
<i>Vice-Director</i>	Thomas Meehan.
<i>Conservator</i>	J. H. Redfield.
<i>Recorder</i>	Isaac Burk.
<i>Secretary</i>	Dr. J. H. Leffman.
<i>Treasurer</i>	J. O. Schimmel.

Respectfully submitted.

THOMAS MEEHAN,
Vice-Director.

Conservator's Report.—At the date of the last report of the Conservator to the Botanical Section of the Academy, the organization of the Section had but recently been perfected by the appointment of its committees and the allotment of their duties. As was then evident, the work which lay before the Committee on the Academy's herbarium was mainly that of completing its new arrangement, and of providing for ready and convenient access to each species of the large collection therein contained. This work has proved no slight task, but it has been vigorously prosecuted in both departments, viz., that of the General Herbarium and that of the N. American. In the former, tablets have been prepared for the several Natural Orders as far as to the end of the Monopetalous Division of the Exogenous Plants; these tablets showing at a glance the proper position of the order, and the genera referred to it; and, in the larger orders, presenting also an alphabetical index to the synonyms. In both departments, covers of stiff Manilla paper have been prepared and inscribed for the several genera, numbered to correspond with the "Genera Plantarum" of Bentham and Hooker, the latest and best authority for systematic arrangement. It is estimated that above 4000 of these covers have been thus used, and probably 2000 more will be needed to complete the work.

The Conservator and the Herbarium Committee have in this labor received most essential aid from Mr. Charles F. Parker, who, after the hours devoted to his regular duties in the Academy, has given his time to the covering of the tablets, and the inscribing of the genus-covers. Mr. Burk has been constant and industrious in carrying on the arrangement of the N. American Herbarium, while our Vice-Director, Mr. Meehan, has had the more delicate task of deciding difficult points in the determination of species. The sub-committee on duplicates have carried on their work of culling and selection, *pari passu*, with the other labor.

A few months more will complete the general arrangement, and the Conservator and the Herbarium Committee will then be able to turn their attention to the work of cataloguing the collection, of noting its wants, and of establishing correspondence for the purpose of procuring deficiencies. Something has already been done in this direction, and correspondence has been opened with botanists in Brazil, Venezuela, and Syria, which will result, it is believed, in benefit to the Academy.

Although so much has been accomplished during the year by volunteer laborers, who, from love of the science, have given such time as could be spared from other duties, it has become more and more evident that there is before us a vast amount of labor, in the way of careful revision and elaboration of species, and the proper mounting of plants, to which volunteer force is inadequate; and we look forward with hope to the day when the public spirit of our community shall sufficiently endow the Academy to enable it to secure the constant work of a competent botanist, and of an expert mechanical assistant. In no other way can our large collection be properly cared for, or be made to yield its full measure of utility.

Allusion has been made above to our North American Herbarium. Our lamented fellow member, Mr. Durand, spent many years in selecting from the general collection materials for the formation of a special herbarium to illustrate the Flora of N. America. The material for this purpose was ample, and of peculiar value, because it largely consisted of plants collected by Schweinitz, Pursh, Nuttall, Baldwin, Oakes, Torrey, Leconte, and others, many of which were type specimens of the early describers, to which have been added from time to time the later acquisitions made by government and individual explorations in our Western Territories. The convenience and value of such a collection cannot be questioned, and accordingly it has been partially provided for in our upper or working-room, where also is stored the valuable and splendidly mounted herbarium of the late Dr. Short. But to complete its proper arrangement we need an additional case of the same size and style as the two now appropriated to the purpose, and it is hoped that the Academy will find means to provide this needed accommodation.

JOHN H. REDFIELD,
Conservator.

Additions to Botanical Museum and Herbarium, 1877.

- Feb. Wm. M. Canby, Wilmington, N. C.; a series of specimens of *Darlingtonia Californica*, Torr., from Northern California, and a specimen of *Canbya candida*, Parry, from San Bernadino Co., California.
- P. V. Leroy, Torrey Herbarium, N. Y.; *Primula suffrutescens*, Gray, from Sierra Nevada, California.

- Dr. Asa Gray, Cambridge, Mass.; 13 species of exotic plants, and 2 of Californian plants; mostly new to us.
- Rev. E. W. Hervey, through J. C. Martindale; *Aster Herveyi*, Gr., from New Bedford, Mass.
- March. Dr. C. C. Parry, Davenport, Iowa; polished section of the wood of *Cercocarpus ledifolius*, from S. Utah.
- John H. Redfield; polished section of *Bauhinia*, from Brazil, and specimen of *Gymnostomum Brandegei*, a new moss from Colorado.
- Thos. Meehan; *Peraphyllum ramosissimum*, Nutt, from Southern Utah; cones of *Pinus palustris*, from Florida.
- Isaac Burk; capsule of a large species of *Bignonia*; fruits of *Anacardium orientale*, *Ophiocaryon paradoxum*, and *Gordonia pubescens*, and some other seeds.
- April. José Carlos Tracy, Peruvian Commissioner to Centennial Exhibition; 57 species of Peruvian woods.
- H. C. Coates, Commissioner from Cape Colony; 54 species of medicinal plants and drugs; 6 species of barks; and samples of vegetable wax from *Myrica cordifolia*, all from South Africa.
- Miss Mary B. Rodney, through J. B. Rodney, Germantown, Phila.; "Plantæ Oregonensis," one volume containing 125 species of plants, collected in Oregon by the donor.
- Mariano Bárcena, Mexican Commissioner; 47 jars of medicinal plants from Mexico.
- Prof. Jos. T. Rothrock, Phila.; 8 species of plants from Arizona, all new to the Herbarium.
- May. Prof. W. G. Farlow, Cambridge, Mass.; Fungus (*Æcidium pyratum*) on *Pyrus angustifolium*.
- Hugh M. Hull, Tasmanian Commissioner; 16 specimens of Tasmanian woods, and 16 samples of Tasmanian seeds, Hobart Town.
- Geo. Kemfc; samples of wheat from Upper Bagdad.
- C. A. Franklin; Sassafras bark (*Atherosperma*).
- Dr. J. Coverdale; gelatinous sea-weed from Port Arthur, and jelly made from the same.
- J. W. Graves; native bread (*Mylitta australis*) from Hobart Town.
- Mrs. John Thomson; native bread (*Mylitta australis*), Cornistoun.

- Mrs. Mitchell (through Australian Commission); gum from the Oyster Bay Pine (*Callitris australis*).
- Commissioners of Lunatic Asylum, Hobart Town; oil from the Blue Gum Tree, *Eucalyptus globulus*.
- Mrs. Paul Shirley; cone of the Cedar of Lebanon.
- H. W. Mitchell; leaves of *Phormium tenax*, Forst, with samples of rope, bags, and brushes made from same, Auckland, N. Z.
- June. T. R. Peale; *Fucus*, Ocean Grove, N. J.
- Sept. Wm. M. Canby, Wilmington, Del.; *Symplocos tinctoria*, L'Her, in fruit, from Sussex Co., Delaware.
- John H. Redfield; 15 species of N. American Ferns, mostly new to our N. American Herbarium; also three species of Californian phænogamic plants.
- Eugene E. Frank, Wilkesbarre, Pa.; *Botrychium Virginicum*, Fr.
- Charles C. Cresson; Rare Fungus (*Cynophallus caninus*, Fr.), Wissahickon woods.
- Oct. Department of Agriculture, Washington, D. C.; 420 species of plants, collected in Utah by Second Division of U. S. Geological and Geographical Survey of the Territories, Maj. J. W. Powell in charge; L. F. Ward, collector.
- Also 72 species of plants collected in Alaska by W. H. Dall, and 30 species collected in the islands of the Pacific by the same.
- C. G. Pringle, Charlotte, Va.; *Gentiana Amarella*, L., var. (*acuta* Mx.), from Smuggler's Notch, Mount Mansfield, Vt.
- Capt. Robert Wiltbank; fruit of the Ivory-nut Palm (*Phytelephas macrocarpus*), from Cardeck R., coast of San Blas, U. S. of Colombia.
- Hampton L., Ann C., and Susan Carson, heirs of the late Dr. Joseph Carson; the botanical collections of Dr. Carson, consisting of dried plants, barks, resins, seeds, etc.
- Dec. Dr. Asa Gray, Cambridge, Mass.; 29 species of exotic plants, principally of the order *Sapotaceæ*, and mostly new to our collection; also 35 species of N. American plants, principally from California and Oregon.